

Date Bids Due 1/14/2015		Time of Bid Opening 1:00 PM	Bid Opening Location 800 Lincoln Way, Ames, IA	
Proposal Number 13396	Description Asphalt Patching Machine, Trailer Mounted			
Contract to Begin	Date of Completion	Proposal Guaranty Amount \$0.00		Liquidated Damages \$0.00
Purchasing Agent Zachary Gillen	E-Mail Address zachary.gillen@dot.iowa.gov	Phone 515-239-1347		Fax 515-239-1538
Company Name				Federal Tax ID
Street Address		City	State	Zip Code
Supplier Contact (type or print)	E-Mail Address	Phone	Fax	
Supplier agrees to sell items/services at the same prices under the same terms and conditions to any other state agency, Regent or Political Subdivision upon request. Please check Yes or No.  <input type="checkbox"/> YES <input type="checkbox"/> NO			Are you a Iowa Targeted Small Business?  <input type="checkbox"/> YES <input type="checkbox"/> NO	

## GENERAL INFORMATION

This bid package includes the proposal, schedule of prices, standard terms and conditions, supplemental terms, specifications, mailing label and other information you need to prepare your bid. The pages of the document labeled "Bid response" must be typed or completed in ink, signed, and returned in a flat style envelope prior to the bid opening date and time. Please use the furnished mailing label, or indicate on your return bid by marking "Iowa Department of Transportation, proposal number & letting date" on the outside of the return envelope. The bidder may personally deliver, mail, or select a carrier that ensures timely delivery. **Faxed bids will not be accepted.**

If required, each bid must be accompanied by a proposal guaranty in an accepted form, in the sum indicated above. Refer to the Standard Terms and Conditions for the accepted forms in which the proposal guaranty requirement may be fulfilled. Bids lacking a required proposal guaranty will not be considered for award. If the contractor fails to enter into a formal contract within fifteen (15) days after award is made, the proposal guaranty may be retained by the State.

## PROPOSAL STATEMENT

The entire contents of this Proposal, Addendums to the Proposal, Specifications, Supplemental Terms and Conditions, Standard Terms and Conditions, and Schedule of Prices shall become part of the contract.

We promise to enter into a contract within fifteen (15) days after award or forfeit the proposal guaranty furnished herewith.

We promise to furnish all materials, equipment and/or services specified, in the manner and the time prescribed, at prices hereinafter set out.

We certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a bid; that this bid has been independently arrived at without collusion with any other bidder, competitor, or potential competitor; and that this bid has not been knowingly disclosed prior to the opening of bids to any other bidder or competitor.

We certify that all materials, equipment and/or services proposed meet or exceed the specifications and will be supplied in accordance with the entire contents of this proposal.

We promise to complete the contract within the contract period, or pay any liquidated damages, if stipulated, for each calendar day as set forth in the bid documents.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_



**Iowa Department of Transportation  
Standard Terms and Conditions For  
Bid Proposals/Contracts  
-FORMAL-**

*Formal* is the procurement process required by Iowa law when the estimated, aggregate amount of the purchase equals or exceeds \$50,000.

The entire contents of this bid proposal shall become a part of a contract or purchase order. In case of a discrepancy between the contents of the bid documents, the following items listed by descending order shall prevail:

- Addendums to the bid proposal
- Bid Proposal-
  - Schedule of Prices
  - Specifications
  - Plans and Drawings
- Supplemental Terms and Conditions
- Standard Terms and Conditions

(Example - if a statement in the specifications contradicts a statement in the Standard Terms and Conditions, the statement in the specifications shall apply)

**Preparation of Bid Response:** All bid responses must address all aspects of the proposal including clearly answering all questions within the proposal. Bid responses must be typed or completed in ink and submitted on the forms supplied by the Iowa DOT.

**Bid responses must be signed and received prior to the bid opening date and time as indicated on the Bid Response cover page or bid opportunity. The signed, submitted quotation or bidder's proposal shall become the official bid response to be considered for award.**

**No email, fax or web link bid responses will be accepted. Bid Responses must be signed, sealed and delivered in person or by a mail courier that ensures timely delivery.**

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**A. Bid Proposal**

1. **Bid Opening:** Bid openings are made public and conducted at the Iowa DOT, Ames complex unless otherwise specified. Proposals received after the time of the bid opening will be returned unopened and considered non-compliant.
2. **Communications:** Questions concerning this proposal should be directed to the purchasing agent listed on the bid proposal. Inquiries can be written, phoned, or faxed. In all cases, written communication will take precedence over verbal communication
3. **Proposal Guarantee:** If required, the bid response page will indicate the amount required to be included in the bid response. A Proposal Guarantee can be supplied in one of the following ways: **(1)** Certified check or credit union certified share draft, cashier's check, or bank draft, drawn on a solvent bank or credit union. Certified checks and certified share drafts shall be drawn and endorsed in the amount indicated. Checks or drafts shall be made payable either to the Iowa Department of Transportation (Iowa DOT) or to the bidder. If payable to the bidder, the check or draft shall be endorsed without qualifications to the Iowa DOT by the bidder or an authorized agent. **(2)** An insurance or surety company may be retained to provide a bond in fulfillment of the proposal guarantee requirement. A properly completed and signed copy of the Proposal Guarantee (*Form 131084*) must accompany the bid. **The Iowa DOT's Proposal Guarantee form must be used; no other forms or formats will be accepted.**
4. **Pricing and Discount:** Unit prices shown on the bid/response shall be quoted as the price per unit (e.g., gal., case, each, etc.) as stated in the bid proposal. If there is a discrepancy between the unit bid prices, extension, or total amount of bid, the unit prices shall prevail. Unless otherwise indicated, prices shall be firm for the duration of the contract or purchase. Discounts for early payment are allowed, but not considered in award of the contract.

5. **Acceptance/Rejection:** The Iowa DOT reserves the right to accept or reject any or all bids and to waive irregularities or technicalities, provided such waiver does not substantially change the offer or provide a competitive advantage to any supplier(s). The Iowa DOT also reserves the right to accept that bid which is deemed to be in the best interests of the state. Any unauthorized changes, additions, or conditional bids including any ties to another bid or proposal or any reservations about accepting an award or entering into a contract, may result in rejection of the bid. Bids must remain available for award for thirty (30) days from date of bid opening.
6. **Bid Results & Disclosure:** Bid tabulations will be posted on the DOT website at [www.iowadot.gov/purchasing](http://www.iowadot.gov/purchasing) under the *Bid Award* link referencing the proposal number with an award recommendation indicated. At the conclusion of the selection process, the contents of all received bid responses will be placed in the public domain and be open to inspection by interested parties, according to state law. Trade secrets or proprietary information that are recognized as such and are protected by law may be withheld if clearly identified as such in the proposal.
7. **Quality:** All material shall be new and of first quality. Items which are used, demonstrators, refurbished, obsolete, seconds, or which have been discontinued are unacceptable without prior written approval by the Iowa DOT.
8. **Recycled Content:** The Iowa Code encourages purchase of products and materials with recycled content, including but not limited to paper products, oils, plastic products, compost materials, aggregate, solvents, and rubber products. Recycled items or alternatives must be noted in the bid response, if known.
9. **Shipping Terms:** Deliveries shall be F.O.B. Destination unless otherwise specified. All deliveries shall be accompanied by a packing slip indicating the Supplier, quantities shipped, and the purchase order number(s). All delivery charges shall be included in the bid price and paid by the Supplier. No collect C.O.D. deliveries shall be accepted. When entering into a contract, the Supplier shall notify the freight company that all freight and delivery charges are to be prepaid by the Supplier. Goods delivered to the Iowa DOT Distribution Center at 800 Lincoln Way, Ames, IA shall be received between the hours of 7:30 a.m. and 3:30 p.m. on any day except Saturday, Sunday, or a holiday. For deliveries to other Iowa DOT locations, the Supplier may contact the destination location for available times to deliver as not all Iowa DOT locations have the same business hours. The Iowa DOT will not be liable for any freight claims or unpaid freight bills arising from contract or purchase order issues.

## B. Award

The binding agreement (award) may be issued in the form a purchase order or contract or both depending on the requirements and complexity of the agreement.

1. **Method of Award:** Award shall be made to the lowest responsible, responsive bidder whose bid meets the requirements of the solicitation and is the most advantageous to the Iowa DOT unless otherwise specified. An Iowa bidder will be given preference over an out-of-state bidder when bid responses are equal in all aspects and are tied in price. By virtue of statutory authority preference will be given to products and provisions grown and coal produced within the State of Iowa.
2. **Award Protests:** Protests of award recommendations are to be addressed to the Director of Purchasing, and shall be made in accordance with paragraph 761--20.4(6)"e" of the Iowa Administrative Code.
3. **Contracts:** Successful contractor(s) may be sent either a formal Contract, Notification of Award or purchase order as confirmation of acceptance and award. Any of these binding agreements shall be for the term stated in the bid proposal or on a purchase order and may be renewed for additional period(s) under the same terms and conditions upon mutual agreement as defined. The successful bidder may not assign a contract to another party without written authorization from the Iowa DOT Purchasing Section.
4. **Payment Terms:** The Iowa DOT typically pays properly submitted vendor invoices within thirty (30) days of receipt, providing goods and/or services have been successfully delivered, installed or inspected (if required), and accepted. Invoices presented for payment must be only for quantities received by the Iowa DOT and must reference the purchase order number to be submitted for processing.
5. **Default:** Failure of the Supplier to adhere to specified delivery schedules or to promptly replace rejected materials shall render the Supplier liable for all costs in excess of the bid price when alternate procurement is necessary. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the binding agreement.

6. **Default:** Failure of a Contractor other than a Supplier to meet any specified project completion deadline shall render the Contractor liable for all costs incurred by DOT that were: a) necessary to meet said deadline; or b) necessary to complete said project after said deadline. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the agreement.

### C. General

1. **Administrative Rules:** For Additional details on the rules governing the actions of the Iowa DOT Purchasing Section, refer to 761 IAC, Chapter 20, Iowa Administrative Code, entitled "Procurement of Equipment, Materials, Supplies and Services".
2. **Affirmative Action:** The Contractor (and also subcontractor, vendor or supplier) is prohibited from engaging in discriminatory employment practices forbidden by federal and state law, executive orders and rules of the Iowa Department of Management, pertaining to equal employment opportunity and affirmative action. Contractor may be required to have on file a copy of their affirmative action program, containing goal and time specifications. Contractors doing business with Iowa in excess of \$5,000 annually and employing 50 or more full time employees may be required to file with the Iowa Department of Management a copy of their affirmative action plan. Failure to fulfill these non-discrimination requirements may cause the contract to be canceled and the contractor declared ineligible for future state contracts or subject to other sanctions as provided by law or rule.
3. **Applicable Law:** The contract shall be governed under the laws of the State of Iowa. The contractor shall at all times comply with and observe all federal and state laws, local laws, ordinances, and regulations which are in effect during the period of a contract and which in any manner affect the work or its conduct. Any legal action relating to a contract shall only be commenced in the Story County, Iowa, District Court or the United States District Court for the Southern District of Iowa.
4. **Conflict of Interest:** No state or county official or employee, elective or appointive shall be directly or indirectly interested in any contract issued by the Iowa DOT, see Code of Iowa 314.2.
5. **Debarment and Vendor Suspension:** By submitting a proposal, the contractor is certifying that it and its principals and/or subcontractors are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by the State of Iowa or any Federal department or agency.
6. **Equal Opportunity:** Firms submitting bids must be an "Equal Opportunity Employer" as defined in the Civil Rights Act of 1964 and in Iowa Executive Order Number Thirty-four.
7. **Infringement:** Goods shall be delivered free of the rightful claim of any third party by way of infringement. Contractor shall indemnify and save harmless the State of Iowa and the Iowa DOT against all claims for infringement of, and/or royalties claimed under, patents or copyrights on materials and equipment furnished under this bid.
8. **Records Audit:** The contractor agrees that the Auditor of the State of Iowa or any authorized representative of the state, and where federal funds are involved, the Comptroller General of the U.S. Government, shall have access to and the right to examine, audit, excerpt, and transcribe any directly pertinent books, documents, papers, and records of the contractor relating to orders, invoices, or payments of a contract or purchase order.
9. **Targeted Small Businesses:** The Iowa DOT seeks to provide opportunities for women and/or minority small business enterprises. To apply for certification as an Iowa Targeted Small Business, contact the Iowa Department of Inspection and Appeals (515-281-5796). Contractors shall take documented steps to encourage participation from Targeted Small Businesses for the purpose of subcontracting and supplying of good or services or both.
10. **Taxes:** Prices quoted shall not include state or federal taxes from which the state is exempt. Exemption certificates will be furnished upon request.
11. **Termination:**
  - **Termination Due to Lack of Funds or Change in Law**  
The Iowa DOT shall have the right to terminate this Contract without penalty by giving thirty (30) days written notice to the vendor as a result of any of the following:
    - Adequate funds are not appropriated or granted to allow the Iowa DOT to operate as required and to fulfill its obligations under contract.
    - Funds are de-appropriated or not allocated or if funds needed by the Iowa DOT, at the Iowa DOT's sole discretion, are insufficient for any reason.
    - The Iowa DOT's authorization to operate is withdrawn or there is a material alteration in the programs administered by the Iowa DOT.
    - The Iowa DOT's duties are substantially modified.

Following a 30 day written notice, the Iowa DOT may terminate a binding agreement in whole or in part without the payment of any penalty or incurring any further obligation to the Supplier. Following termination upon notice, the Supplier shall be entitled to compensation upon submission of invoices and proper proof of claim for goods and services under contract up to and including the date of termination.



## Schedule Of Prices

Number	13396
Date Required	01/14/2015 1:00 PM

**Title** Asphalt Patching Machine, Trailer Mounted  
**Delivery Location** AMES, IA 50010  
**Shipping Terms** FOB Destination/Freight Prepaid

**Vendor**  
**PA Name** Zachary Gillen  
**Phone** 515-239-1347  
**E-Mail** zachary.gillen@dot.iowa.gov

### Description

**Product Availability Days:** \_\_\_\_\_

Item	Qty	Unit	Description	Part #	Unit Price	Total Price
1	2	EACH	15 B307 Asphalt Patching Machine, Trailer Mounted, As per Spec No. 2-B307-1114 See Attached Specifications			
Comments:						

I HEREBY CERTIFY THAT THIS PROPOSAL MEETS OR EXCEEDS THE MINIMUM REQUIREMENT  
INCLUDING SPECIFICATIONS AND ADDENDUMS.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## IOWA DEPARTMENT OF TRANSPORTATION

## EQUIPMENT SERVICES

## SPECIFICATIONS

for

## TRAILER MOUNTED, ASPHALT ROAD PATCHING MACHINES

The following specifications shall apply to the purchase of trailer mounted, asphalt patching machines by the Iowa Department of Transportation, Iowa DOT. Units shall use a spray injection method for the repair of cracks, potholes and broad distressed areas. Units shall be capable of blowing water, dust and debris from the pothole or surface to be repaired, apply a tack coat of hot emulsion, bring patch to grade with emulsion coated aggregate and apply a cover of dry aggregate.

Machine bid shall be suitable for use with water emulsified asphalt, such as CRS-2 and its polymerized variant CRS-2P produced in compliance with Iowa DOT Standard Specifications 4140, series 1997 (CRS-2 as per the latest addition of AASHTO M 208 and ASTM D 2397; CRS-P modification as per Standard Specification 4140).

**1. ENGINE**

- A. Unit shall be powered by an electric start, liquid cooled, industrial diesel engine (John Deere 4045D-30, Cummins 4B3.9 (counterbalanced) or approved equal) developing not less than 74-HP. Power unit shall include a fuel tank large enough to insure 10-hours, minimum, of uninterrupted operation at full machine capacity.
- B. Engine shall be equipped with:
  - a. High temperature shutdown.
  - b. Low oil pressure shutdown.
  - c. Full gauge package, to include volt or ammeter, oil pressure, fuel level, temperature and hour meter with oil or alternator excited sensor.
  - d. Keyed ignition.
  - e. Fuel line filter and shutoff.
  - f. Air intake filter, pre-cleaner.
  - g. Engine shall be enclosed in a protective cover with easily accessible panels to allow for regular maintenance and servicing.
- C. Engine shall be muffled so as to not cause an operator to exceed OSHA 8-hour hearing exposure limits as per OSHA standard no.1910.95.

**2. AIR SYSTEM**

- A. Air system shall be driven directly from the engine and be capable of supplying adequate CFM for the proper operation of the machine.
- B. Blower shall be equipped with a silencer for noise suppression.

### 3. HYDRAULICS – Where Applicable

- A. Hydraulics shall be designed to maintain a system operating temperature range of 120 to 180°F regardless of load or outside temperature.
- B. All hydraulic control valves, motors, etc. shall have a similar flow rating as the hydraulic pump to help reduce restriction and heat buildup in the system.
- C. All hydraulic system components, hoses and tubes shall be rated in excess of all anticipated temperatures and pressures with an adequate safety margin.

### 4. ASPHALT TANK

- A. Tank shall be ASME certified, cylindrical in shape with a 225-300 gallon capacity.
- B. Tank shall be insulated on all surfaces with manufacturer's standard insulation.
- C. Tank shall have an approximate 8-inch hinged lid for loading of material.
- D. There shall be a minimum 3-inch, direct reading dial thermometer for the emulsion.
  - a. Emulsion thermometer shall be installed in such a manner so that it will accurately read with as little as 25-gallons of usable material in the tank.
  - b. Gauge shall be visible from the rear of the unit when using the applicator.

### 5. HEATING SYSTEM

- A. Units shall have an automatic temperature controlled heating system to maintain the asphalt emulsion at a temperature of 150 to 170°F during the workday.
  - a. System shall sufficiently maintain asphalt emulsion for use in ambient temperatures down to 20°F.
  - b. All components in contact with emulsion, including emulsion tank, hoses and spray nozzle shall be heated.
  - c. Application hoses shall be contained in an insulated wrap or cover for their entire length.
- B. A 120 volt, AC electric "overnight" heater will be used for tank preheat and to maintain the emulsion temperature when unit is not in use.
  - a. Heater shall be thermostatically controlled and able to maintain a full load of emulsion in an application state.
  - b. Heater operation will not be dependent on the amount of material in the tank and may be used to pre-heat an empty tank prior to filling.

### 6. ASPHALT EMULSION PLUMBING SYSTEM AND BOOM

- A. Asphalt emulsion delivery system shall be the manufacturer's standard.
- B. All controls shall be clearly marked as to their function
- C. Manufacturer's standard self-contained flush and recovery system for flushing through the boom hose and outlet tip for cleaning shall be supplied.



7. AGGREGATE DELIVERY SYSTEM

- A. Successful bidder shall supply either a gravity or auger style, tailgate feeder system for installation into the rear of a Department dump body or tailgate.
- B. Feeder and hopper controls, if required, shall be operated from the operator's boom assembly.

8. APPLICATOR BOOM AND CONTROLS

- A. Machine shall be equipped with a three section applicator boom with a minimum reach of 18-feet and a minimum coverage area of 1000-ft<sup>2</sup>.
  - a. Boom shall support and carry delivery hoses and allow for easy movement throughout the coverage area.
- B. Applicator system shall be equipped with on/off and regulating controls at the boom operator's position for blowout, tack coating, aggregate delivery and engine speed.
- C. All lines shall run through a full length insulated cover for cold weather operation.
- D. If machine uses seasonal/replacement nozzles, two (2) summer and two (2) winter replacement nozzles will be supplied.

9. TRAILER (See "Trailer Requirements")

- A. Trailer shall be a tandem axle design with (2) 6,000-pound axels and a minimum GVWR of 12,000-pounds.
- B. Tongue shall be of an "A" frame design equipped with an adjustable height pintle eye towing connector and an appropriately sized swing-up jack.
- C. Fenders shall be full steel 14-gauge minimum, with adequate bracing to support 300-pounds and have a non-slip surface.
- D. Tires shall be tubeless trailer radials sized and rated to meet or exceed the rated axle capacity.
- E. Wheels shall be steel OEM type properly sized and rated for the tires.
- F. Complete unit, when loaded, shall have 8-10% of its total weight transferred to the pintle eye.

10. PAINT

Manufacturer's standard color will be acceptable. Paint and its application shall be of high quality. Finish shall be smooth, shiny and free from runs, overspray and/or other defects.

11. COMPLETENESS

- A. Machine shall be fully assembled, tested and ready for immediate service upon delivery.

- B. All equipment catalogued as standard and shown in the manufacturer's standard literature shall be provided and included in the bid price. Exception: No safety lights or signal arrows are requested on these units. The Department will supply all traffic control devices and equipment when at a work site. All component parts of the unit shall be of proper size and design to safely withstand the maximum stresses imposed by all phases of operation.

## 12. TRAINING

Successful vendor shall provide a minimum of one (1) day, (8-hours) of operation and safety training per unit at an Iowa DOT work site designated by the Department once the machines have been delivered. Instructor shall be factory trained in all aspects of machine operation, safety, maintenance and repair.

## TRAILER REQUIREMENTS

### 1. GENERAL REQUIREMENTS

Unless requested differently in the proceeding specifications, the following trailer requirements will apply:

- A. All trailers provided to the Department shall conform to Federal Motor Carrier Safety Regulations, Federal Motor Vehicle Safety Standards and Regulations and Code of Iowa Section 321 requirements. It is expected that all trailer mounted equipment manufacturers and vendors be familiar with and have copies of the above regulations/codes available to them.
- B. All welding shall conform to current industry standards and American Welding Society recommendations.
- C. All trailers with a static weight of 2,000-pounds or more must be furnished with a Manufacturer's Statement of Origin (MSO) when it is delivered. This is necessary to comply with Code of Iowa requirements (321.1223) for the registration of trailers.
- D. The following information shall be supplied and attached to one (1) of the trailer tongue rails on a permanent and indelible plate or decal:
  - a. Manufacturer (company name and address).
  - b. Model Number (exact model designation).
  - c. GVWR Rating (gross vehicle weight restriction).
  - d. Empty Weight (actual weight at delivery – **NOT** an estimate).
  - e. Cargo Capacity (GVWR minus the empty weight).
  - f. Date of Manufacturer (month/year).
  - g. Serial Number
  - h. VIN Number (if different from the serial number).

- E. In addition to the information listed, the left tongue rail or “face” shall be conspicuously stenciled between the connector plate and front of the trailer mounted equipment with the following information:
- a. GVWR Weight xxxxxx Pounds (Same as D. c.).
  - b. Empty Weight xxxxxx Pounds (Same as D. d.).
  - c. Cargo Weight xxxxxx Pounds (Same as D. e.).

## 2. PINTLE EYE HITCHES

All trailers requested shall be equipped with a pintle eye hitch that shall conform to the following minimum requirements:

- A. Trailers shall be equipped with a towing device connector plate at the front of the main tongue assembly. Connector plate shall allow the pintle eye to be adjustable from 24-1/4 inches to 33-1/4 inches in increments of 2-1/4 inches when the trailer is sitting level.
- B. Plate shall be either a heavy 8-inch steel channel or 3/4-inch x 6-inch steel plate. Two (2) minimum 1/4-inch x 2-inch braces shall be installed from the top of the connector plate back to the main tongue beams in a right triangular fashion to reinforce the connector plate.
- C. A 4-bolt, 2-1/2 inch pintle eye shall be provided and installed to the towing connector plate. Pintle eye shall have a minimum lateral pull rating of 30,000-pounds and a minimum tongue weight rating of 6,000-pounds.
- D. Pintle eye attachment bolts shall be a minimum 5/8-inch diameter, grade-8. Adjustment holes for pintle eyebolts shall have nuts welded to the back of the hitch plate for convenient changing of pintle eye height.
- E. Clearance between pintle eye center and any obstruction above the top of the towing tongue rails shall be a minimum of 53-inches. This clear “zone” is necessary to accommodate attachment to a Department snow removal truck with a tailgate sander installed. *Note: The locating of patcher’s hopper in this “zone” would be exempt of this requirement.*

## 3. SAFETY CHAIN REQUIREMENTS

- A. Safety chains shall be provided, installed and meet the following requirements:
  - a. Safety chains shall have a minimum grade-40 (G40) rating and be marked. Unmarked chains will **NOT** be accepted. Chains, attaching points and components shall have a minimum working load rating equal to or greater than the GVWR of the trailer. Welding of any safety chain component is not acceptable.
  - b. Safety chains shall extend 30-inches beyond the center of the pintle “eye” connector.

- c. Safety chains shall attach to the towing vehicle's eye bolts or 3/4-inch, "D" rings with Grade-80 eye sling hooks (also called "chain sling lifting hooks"). These hooks shall be equipped with a spring loaded, safety latch. Hooks shall be appropriately sized for the chain being used and rated for or exceed the GVWR of the trailer.

4. TRAILER L.E.D. ILLUMINATION REQUIREMENTS (See Trailer Wiring Diagram)

- A. The Iowa DOT has standardized trailer illumination requirements, selecting Truck-Lite L.E.D. components for lights and Peterson Mfg. for reflectors. If other components are being considered, they must have prior approval by Equipment Services, Mike Lauzon (515-239-1607).
- B. All lights and reflectors must meet current State of Iowa and Federal requirements. All reflectors shall be self-adhesive, flat (<0.015-inches thick) nominal 3-inch round parabolic.
- C. All L.E.D. lights shall be sealed and mounted in shock absorbing rubber grommets.
- D. Use of Truck-Lite branch deflector mounts is acceptable **IF** the size of the lamps or unit design makes flush mounting impractical. Branch deflector mounts should **NOT** be used unless necessary. If the wiring to these mounts must pass through a steel member, a rubber grommet shall be installed in the hole to protect the wiring.
- E. Reference – [www.nhtsa.dot.gov/cars/rules/standards/conspicuity/Trlrpstr.html](http://www.nhtsa.dot.gov/cars/rules/standards/conspicuity/Trlrpstr.html).

5. TRAILER ELECTRICAL REQUIREMENTS (See Wiring Diagram)

- A. All wiring circuits shall junction in a sealed Midland BE22070, or equal, circuit breaker box. Lighting system shall have 15-amp circuit breakers installed for circuit protection and electric brake system shall have 20-amp circuit breakers installed for circuit protection. Lighting and electric brake cable shall be firmly secured to the tongue to prevent being pulled from the circuit breaker box.
- B. Lighting system electrical connector shall be a heavy-duty, 6-pole male plug (Midland BE23603, Cole Hersee 1236 or equal).
- C. Electric brake system connector shall be a heavy-duty, 4-pole male plug (Midland BE23403, Cole Hersee 1233 or equal).
- D. When attached to the appropriate wire cables, as listed below, the above connectors shall extend 15-inches forward from the center of the trailer pintle "eye". These cables shall be firmly secured to the tongue to prevent their being yanked from the circuit breaker box.
- E. All wiring used on Department trailers shall be a minimum of 14-gauge, copper with a minimum of 19-strands per wire. All circuits shall be wired back to the circuit breaker box with a central ground as per the wiring diagram.
- F. Lighting cable shall be a Midland 28614 or approved equal and the brake cable a Midland 28414 or approved equal. Individual cable wires shall have color coded insulation.

- G. All wiring shall be supported and protected from the outside environment.
- H. All wiring splices shall be **soldered** and then insulated. Vinyl covered, unsealed crimp type and/or Scotch-Lock type connectors are not acceptable for any application unless requested by the Department.
- I. All plug connectors shall be liberally coated with a corrosion preventative electrical grade lubricant.

6. SAFETY BREAKAWAY SYSTEM

A. The Federal Motor Carrier Safety Regulations require the following:

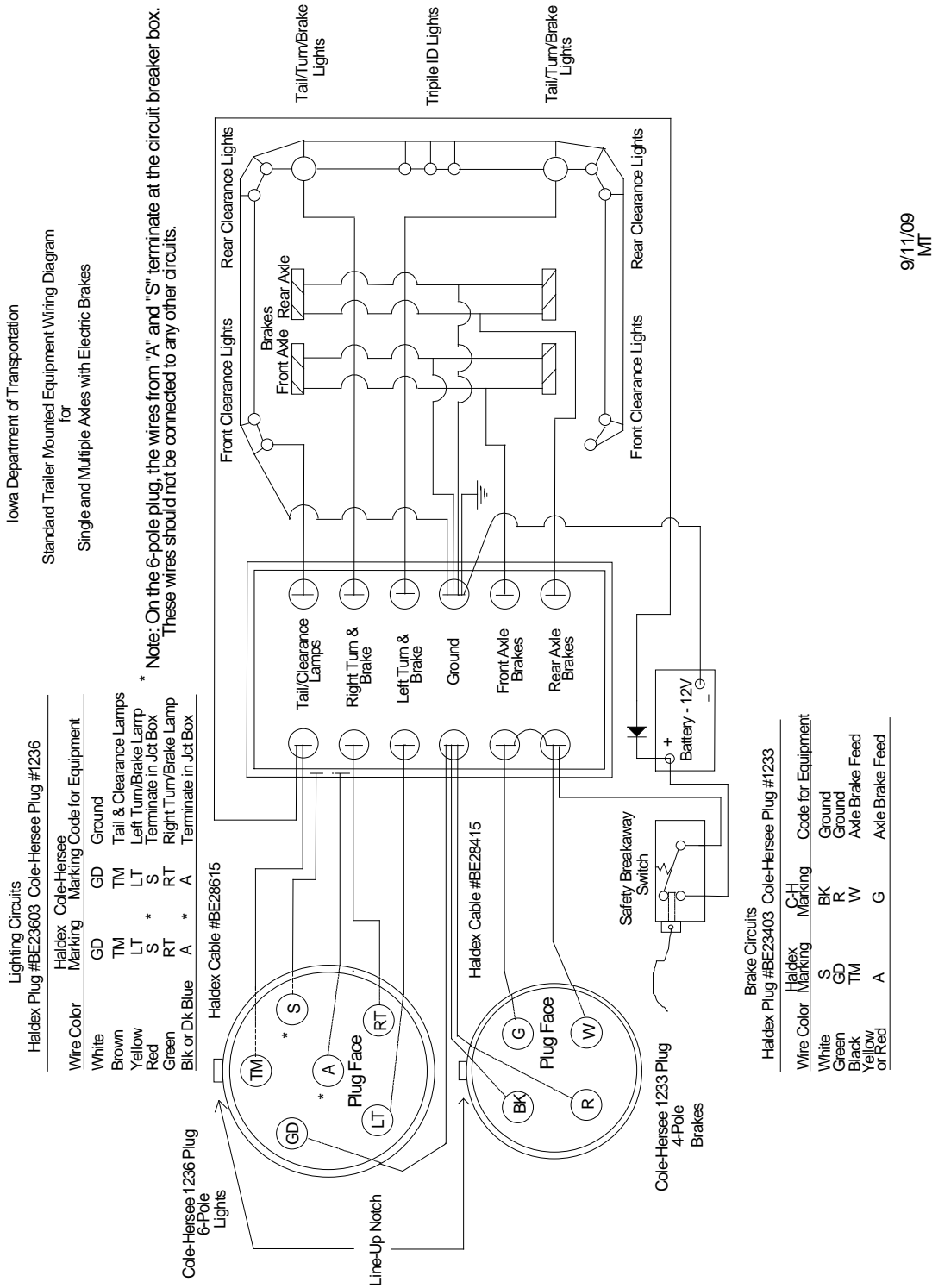
- a. Subsection 393.30 – Any battery installed on a trailer must be located in an enclosure of adequate and substantial design.
- b. Subsection 393.42 – Any trailer with a GVWR in excess of 3,000-pounds must be equipped with brakes on all wheel position (surge brakes are **NOT** acceptable).
- c. All trailers equipped with brakes also shall be equipped with a safety breakaway system. Breakaway system shall apply the trailer brakes and hold them in a locked position of a minimum of 15-minutes from the time of their activation.

B. The Iowa DOT requires the following:

Any standard towed trailer without a regenerative power source (such as an engine) shall be equipped with a breakaway battery that is a rechargeable sealed gel, 12-volt type rated for use in up to triple axle application. Breakaway electrical system shall include wiring to allow the battery to be charged when the towing vehicle's running lamps are on but not allow battery voltage to feed back to the towing vehicle.

*Note: Since a regenerative power source is used on asphalt patching machines, the breakaway battery mentioned above is not required. The breakaway brake switched may be wired to the engine battery.*

Trailer Wiring Diagram



**Iowa Department of Transportation  
SUPPLEMENTAL TERMS & CONDITIONS  
For  
Asphalt Patching Machine, Trailer Mounted  
Proposal No.: 13396  
Letting Date: January 14, 2015**

**Contract Award**

It is the intent of the Iowa DOT to award the contract to the responsible bidder whose submitted quotation is the most advantageous to the Iowa DOT, cost and other factors considered. Other factors include, but are not limited to: meeting or exceeding mandatory requirements, proposed staffing, and meeting required time schedule. One contract will be awarded for all items.

**Contract Period**

The successful bidder will be awarded a one (1) year contract with an option to renew for three (3) additional years in twelve (12) month increments. A price adjustment may be allowed on each extension but must not exceed the CPI. (PPI or appropriate index for adjustment may be used) Any adjustment must be mutually agreed upon and be pre-approved by the Iowa Department of Transportation, Purchasing Section.

**Contract Quantities**

Quantity stated is the minimum quantity that will be purchased throughout the contract period.

**Purchase Orders**

Purchase orders will be issued for items as needed throughout the contract period

**General**

Model bid shall be current standard production, produced in quantity for national distribution. Manufacturer shall have a minimum of 2-years of production experience with the model being bid. Repair parts and additional accessories shall be readily available from the successful bidder.

The Department may at its discretion require a demonstration of the exact model bid. Demonstrations will be at a work site of the Department's choosing within the State of Iowa. Department will supply materials.

**Manuals**

A total of five (5) manuals shall be supplied. Manuals shall include operator, service and repair information as well as an illustrated parts list. Manuals shall be delivered to Equipment Services (Ames, IA) on or before delivery of the unit.

**Warranty**

Entire unit shall be covered under warranty for at least one (1) year of service. Warranty shall include all parts and labor to correct any material, workmanship or manufacturer defects. If component manufacturer's warranties are for a longer period, they shall apply. Warranty shall begin when unit is delivered to the assigned Iowa DOT field location.

**Alternatives or Exceptions**

Any equipment being offered as an alternative to the specified make/model must be submitted on the enclosed form "Bidder's Request for Alternatives or Exceptions." The form must specifically state the requested alternative and be accompanied by adequate supporting information to evaluate the request.

The "Bidder's Request for Alternatives or Exceptions" form must be received in sufficient time ***prior*** to the bid opening to evaluate and respond with the appropriate action. It is suggested that any requests for alternatives be submitted either by e-mail or fax immediately upon receipt of the proposal in order to receive full consideration. Fair treatment to all vendors shall be the primary concern in evaluation of requests for proposed alternates, particularly those submitted just prior to the bid opening. **Do not submit "Bidder's Request for Alternative or Exceptions" with your bid response.**

**Separate Bids**

A bidder may quote prices on more than one model. Complete a separate Schedule of Prices for each make/model bid.



# Bidders Request for Alternatives or Exceptions (BRAE)

## Iowa Department of Transportation

Letting Date: January 14, 2015

BRAE form due on or before: January 7, 2015

Proposal No.: 13396

Spec. No.: 2-B307-1114

Item: \_\_\_\_\_

Request: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Bidder Proposes to furnish in lieu of above: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

NOTE: The determination of acceptance of this BRAE request is only valid for the bid for which it was submitted. BRAE approvals received for this bid do not determine or set a precedent for what is acceptable in any other bid posted by the State of Iowa.

Email/Fax to:

Iowa Department of Transportation  
Purchasing Section  
Attention: Zach Gillen  
Email: zachary.gillen@dot.iowa.gov

Fax No.: 515-239-1538

Submitted By \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City State Zip

Phone No. \_\_\_\_\_

Fax No. \_\_\_\_\_

=====

DOT USE ONLY

Approved \_\_\_\_\_

Disapproved \_\_\_\_\_

Reason \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Forms/bidders request for exceptions or equals form

Bidder \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **SEALED BID**

**LETTING DATE:** January 14, 2015

**PROPOSAL NO:** 13396

**PROPOSAL DESCRIPTION:** Asphalt Patching Machine, Trailer Mounted

**Iowa Department of Transportation  
PURCHASING - SEALED BID PROPOSAL  
800 Lincoln Way  
Ames, IA 50010**